Abstract of the Disclosure

An endoscope probe system includes an endoscope probe to be inserted into a body cavity to observe tissue of a living body. The endoscope probe system further includes a laser source that emits multiple laser beams, a light detector having multiple light receiving elements each of which detects intensity of light incident thereon, and a plurality of confocal optical systems arranged to focus the laser beams emitted from the laser source to small spots arranged in a matrix pattern on the target and selectively transmit the laser beams reflected by the target at the spots to respective ones of the light receiving elements of the light detector.